

Amendment to the Claims

1 - 14      Canceled.

15 (Currently Amended).    A Wireless Local Area Network (WLAN) device, comprising:

- a first baseband processor interface for receiving, processing and generating digital data;
- a first radio for receiving the digital data and for transmitting RF signals in a first frequency band according to a first communication protocol and for receiving RF signals in the first frequency band and for producing corresponding digital data to the first baseband processor interface;
- a second baseband processor interface for receiving, processing and generating digital data;
- a second radio for receiving the digital data and for transmitting RF signals in a second frequency band according to a second communication protocol and for receiving RF signals in the second frequency band and for producing corresponding digital data to the second baseband processor interface, and
- a single at least one baseband processor that transmits outgoing data and receives ingoing data through the first and second baseband processor interfaces; and
- band selection logic wherein the WLAN device scans a plurality of channels in the first and second frequency bands transmitted according the to the first and second communication protocols to select a channel for a subsequent communication.

16 (Original). The WLAN device of claim 15 further comprising logic for determining a quality indicator, wherein the quality indicator for a selected channel considers a channel power and interference power for the selected channel.

17 (Original). The WLAN device of claim 16, wherein the interference power includes in-channel interference and adjacent channel interference.

18 (Original). The WLAN device of claim 15, further comprising logic for selecting a communication protocol for operation from a plurality of available communication protocols.

19 (Original). The WLAN device of claim 15 further including logic for selecting at least two frequency bands and communicating over at least one channel in each of the two frequency bands.

20 (Original). The WLAN device of claim 15 further including first and second radio interfaces and first and second baseband processors wherein the first baseband processor communicates with the first baseband processor interface by way of the first radio interface and the second baseband processor communicates with the second baseband processor interface by way of the second radio interface.

21 (Original). The WLAN device of claim 15 further including first and second radio interfaces wherein the first baseband processor communicates with the first baseband processor interface by way of the first radio interface and with the second baseband processor interface by way of the second radio interface.

22 (Currently Amended). A Wireless Local Area Network (WLAN) device, comprising:

a single baseband processor for receiving, processing and generating digital data;

a first radio for receiving the digital data and for transmitting RF signals in a first frequency band and for receiving RF signals in the first frequency band and for producing corresponding digital data to the at least one baseband processor;

a second radio for receiving the digital data and for transmitting RF signals in a first frequency band and for receiving RF signals in the first frequency band and for producing corresponding digital data to the at least one baseband processor;

first and second baseband processor interfaces operably coupled to first and second radios that communicate according to first and second communication protocols;

first and second radio interfaces operably coupled to the single baseband processor wherein the first and second radio interfaces are operably coupled to communicate with the first and second baseband processor interfaces;

wherein the single baseband processor generates digital data for transmission from one of the first radio, the second radio or both wherein the single baseband processor produces the digital data through one of the first radio interface, the second radio interface or both for transmission; and

wherein the single baseband processor, the first and second radios, the first and second baseband processor interfaces, first and second radio interfaces are all a part of a single WLAN device; and

wherein the WLAN device scans a plurality of channels in the first and second frequency bands transmitted according to the first and second communication protocols to select a channel for a subsequent communication.

23 (Original). The WLAN device of claim 22 further comprising logic for determining a quality indicator, wherein the quality indicator for a selected channel considers a channel power and interference power for the selected channel.

24 (Original). The WLAN device of claim 23, wherein the interference power includes in-channel interference and adjacent channel interference.

25 (Original). The WLAN device of claim 22, further comprising logic for selecting a communication protocol for operation from a plurality of available communication protocols.

26 (Original). The WLAN device of claim 22 further including logic for selecting at least two frequency bands and communicating over at least one channel in each of the two frequency bands.

27 - 34 Canceled.

35 (Currently Amended). A method for a Wireless Local Area Network (WLAN) device, comprising:

receiving, a first radio, digital data and transmitting RF signals in a first frequency band according to a first communication protocol and receiving RF signals in the first frequency band and producing corresponding digital data to a single baseband processor;

receiving, in a second radio, the digital data transmitting RF signals in a first second frequency band according to a second communication protocol and receiving RF signals in the first second frequency band and producing corresponding digital data to the single baseband processor;

scanning a plurality of channels to determine which of a plurality of frequency bands and associated communication protocols should be used for a communication; and

generating, from the single baseband processor, the digital data for transmission from one of the first radio, the second radio or both wherein the single baseband processor produces the

digital data through one of a first radio interface, a second radio interface or both for transmission.

36 (Previously Presented). The method of claim 35 further comprising determining a quality indicator, wherein the quality indicator for a selected channel considers a channel power and interference power for the selected channel.

37 (Previously Presented). The method of claim 35 further comprising selecting a communication protocol for operation from a plurality of available communication protocols.

38 (Previously Presented). The method of claim 35 further comprising further including selecting at least two frequency bands and communicating over at least one channel in each of the two frequency bands.